

TECHNICAL AMENDMENTS TO THE CLAIMS:

Please cancel claims 3, 8-10, 12-23, 29, 30, 32, 33 and 37 without disclaimer or prejudice to Applicant's right to pursue the subject matter of these claims in a future divisional or continuation application.

Listing of Claims:

Claims 1-37 (Cancelled)

38. (Previously added) An isolated and purified nucleic acid comprising a nucleotide sequence encoding a polypeptide having the amino acid sequence of AtMSH3 (SEQ ID NO: 19).
39. (Previously added) The nucleic acid of claim 38 further comprising a regulation element operably linked to said AtMSH3-encoding sequence.
40. (Previously added) A plasmid or vector comprising the nucleic acid of claim 39.
41. (Previously added) A plant cell stably transformed, transfected or electroporated with the plasmid or vector according to claim 40.
42. (Previously added) A plant comprising the cell according to claim 41.
43. (Previously added) A process for at least partially inactivating the DNA mismatch repair system of a plant cell, comprising:

transforming or transfecting said plant cell with a nucleic acid comprising a

regulation element operably linked to a nucleotide sequence encoding

a polypeptide having the amino acid sequence of AtMSH3 (SEQ ID
NO: 19);

growing said cell under conditions that permit expression of said AtMSH3-
encoding sequence; and

inactivating said DNA mismatch repair system of said plant cell.

44. (Previously added) The process of claim 43, wherein said plant is selected from the group consisting of Brassicaceae, Poaceae, Solanaceae, Asteraceae, Malvaceae, Fabaceae, Linaceae, Canabinaceae, Dauaceae and Cucurbitaceae.